

life has been produced at all upon other planets than our own, it has assumed forms of which we know nothing; forms which may be neither animal nor vegetal, which transcend our experience, and of which we are therefore quite unable to conceive. Given life, plastic and protean, and the laws of probabilities, and such a result would seem to follow as a matter of course.

Even could we actually perform the journey to Mars, it is not likely that we would be able to communicate with its inhabitants, and if we found existing there a great number of life forms we would probably have difficulty in deciding to which of them, if any, the designation people should be applied.

OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made partly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological Observations at Honolulu, December, 1900.

The station is at 21° 18' N., 157° 50' W.
Hawaiian standard time is 10^h 30^m slow of Greenwich time. Honolulu local mean time is 10^h 31^m slow of Greenwich.

Pressure is corrected for temperature and reduced to sea level, and the gravity correction, -0.06, has been applied.

The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 12, or Beaufort scale. Two directions of wind, or values of wind force, or amounts of cloudiness, connected by a dash, indicate change from one to the other.

The rainfall for twenty-four hours is measured at 9 a. m. local, or 7.31 p. m., Greenwich time, on the respective dates.

The rain gage, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 43 feet, and the barometer 50 feet above sea level.

Date.	Pressure at sea level.		Temperature.		During twenty-four hours preceding 1 p. m., Greenwich time, or 2.29 a. m., Honolulu time.								Total rainfall at 9 a. m., local time.
	Dry bulb.	Wet bulb.	Temperature.		Means.		Wind.		Average cloudiness.	Sea-level pressures.			
			Maximum.	Minimum.	Dew-point.	Relative humidity.	Prevailing direction.	Force.		Maximum.	Minimum.		
1.....	29.89	73.4	71.4	80	69	66.0	73.4	ne.	2	1	29.97	29.85	0.02
2.....	29.86	70	68	80	71	68.0	73	e-ne.	2	7-7	29.95	29.84	0.00
3.....	29.89	67	65	80	69	66.3	75	ne.	3-1	5-2	29.91	29.83	0.00
4.....	29.88	66	64	80	67	65.7	73	ne.	1	1	29.95	29.83	0.00
5.....	29.91	73	67.5	81	65	66.5	80	sw-n.	1-0	1-3	29.93	29.83	0.08
6.....	29.97	72	68	78	71	66.5	78	nne-ne.	3	3	30.00	29.90	0.63
7.....	29.99	72	67	77	70	66.7	81	ne.	3	3	30.02	29.95	0.27
8.....	29.96	63	61.5	77	70	63.0	72	nne.	3	10-2	30.03	29.92	0.01
9.....	29.96	70	64.5	78	62	63.5	77	nne.	1	1-7	29.98	29.86	0.00
10.....	29.94	66	65	76	69	63.3	75	nne.	3-0	3-6	29.98	29.89	0.09
11.....	29.99	67	67.5	74	66	65.5	87	nne.	2	2	30.00	29.91	0.09
12.....	30.02	73	67	78	69	66.0	80	nne.	2	2	30.04	29.97	0.03
13.....	30.04	74	68	79	71	66.7	68	ne.	2	2	30.09	30.03	0.00
14.....	30.04	73	66	79	73	65.3	70	ne.	2-4	3-5	30.09	29.99	0.00
15.....	30.09	74	66.5	79	73	64.0	68	ne.	2-0	3-0	30.10	30.01	0.00
16.....	30.07	70	67	80	67	63.7	67	ne.	3-0	3-6	30.13	30.05	0.00
17.....	30.02	62	60.5	80	69	65.5	77	w-n.	1-0	4-1	30.09	29.99	0.00
18.....	29.95	61	60.5	79	62	60.5	75	n.	2	2	30.02	29.90	0.00
19.....	29.95	67	66	78	60	64.3	81	se-sw.	1-0	2	29.98	29.90	0.00
20.....	30.04	67	64.5	79	67	65.5	77	se-w.	1-0	2-7	30.07	30.00	0.00
21.....	30.05	64	62.5	82	66	65.3	79	ne-e.	1-0	2-7	30.07	30.00	0.00
22.....	29.95	69	67	78	64	63.7	76	ne.	1-0	4-0	30.07	29.93	0.02
23.....	29.89	64	63.5	79	65	65.5	76	nne.	1-0	16-1-8	29.98	29.86	0.01
24.....	29.87	73	68.5	79	64	66.3	84	e-sw.	1-0	1-8	29.91	29.83	0.16
25.....	29.92	69	67	80	70	66.7	77	sw.	2-0	5	29.94	29.84	0.26
26.....	29.94	70	64.5	78	66	66.5	81	ws-w.	1-0	3	29.98	29.90	0.00
27.....	29.93	69	60.5	75	70	61.7	71	nne.	3-6	2-6	30.01	29.92	0.00
28.....	29.98	64	57	75	68	56.3	60	nne.	5-4	4-0	29.99	29.89	0.00
29.....	29.99	59	56	72	62	53.8	61	nne.	3-1	3-0	30.01	29.91	0.00
30.....	29.98	56	54	73	58	53.7	64	nne.	1-3	6-0	30.06	29.97	0.00
31.....	29.94	64	58	74	55	53.7	67	nne.	0-3	1	30.05	29.93	0.00
Sums.....													1.67
Means.....	29.963	67.8	64.3	77.7	66.4	63.5	74.5		1.7	4.2	30.016	29.917	
Departure..	-.005					+0.5	-0.8						-3.00

Mean temperature for December, 1900 (6+2+9) ÷ 3 = 71.6; normal is 71.5. Mean pressure for December, 1900 (9+3) ÷ 2 = 29.965; normal is 29.970.

*This pressure is as recorded at 1 p. m., Greenwich time. †These temperatures are observed at 6 a. m., local, or 4.31 p. m., Greenwich time. ‡These values are the means of (6+9+2+9) ÷ 4. §Beaufort scale.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Manuel E. Pastrana, Director of the Central Meteorologic-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the Boletín Mensual. An abstract, translated into English measures, is here given, in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for December, 1900.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
Chihuahua.....	Feet.	Inch.	° F.	° F.	° F.	%	Inch.		
Leon (Guanajuato)...	4,633	25.48	61.7	26.8	44.2	60	0.02	ne.
Mazatlan.....	5,994	24.33	72.3	39.4	54.5	73	2.06	ssw.	sw.
Mexico (Obs. Cent.)...	25	29.96	83.8	60.3	73.2	65	0.18	nw.
Morelia (Seminario)...	7,472	23.09	69.8	41.0	52.3	74	4.50	n.	sw.
Saltillo (Col. S. Juan)...	6,401	24.00	70.7	41.0	52.5	81	3.15	sse.
San Luis Potosi.....	5,399	24.81	69.8	33.8	51.8	82	2.88	s.
Tampico.....	6,202	24.16	7.2	37.0	53.4	78	3.20	ne.
Zapotlan (Seminario)	5,078	25.13	75.9	46.4	59.9	74	3.49	sse.	sw.

MONTHLY STATEMENT OF AVERAGE WEATHER CONDITIONS FOR DECEMBER.

By Prof. E. B. GARRIOTT.

The following statements are based on average weather conditions for December, as determined by long series of observations. As the weather of any given December does not conform strictly to the average conditions the statements can not be considered as forecasts:

Settled weather prevails in the tropical regions of the Atlantic and Pacific oceans in December. In the middle latitudes of the North Atlantic, on an average, three storms of marked strength traverse the ocean from the American to the European coasts. These storms follow closely the paths of the transatlantic steamships, and usually occupy three to four days in the passage from Newfoundland to the British Isles. December is one of the months of minimum fog frequency along the transatlantic steamship routes, and icebergs are seldom seen over or near the Banks of Newfoundland.

The severer storms of December average about three a month over the Great Lakes and on the north Atlantic coast of the United States; about two a month on the middle Atlantic coast; and about one a month on the south Atlantic, Gulf, and middle and north Pacific coasts.

December is one of the months of maximum rainfall in the Pacific coast districts of the United States. It is also one of the wet months in the middle and northern Plateau districts. In Arizona and New Mexico the winter precipitation is much lighter than that of the summer months. On the eastern slope of the Rocky Mountains and in the Missouri and upper Mississippi valleys December is one of the driest months of the year. In the Gulf districts the rainfall averages less than that of the summer and fall months. In the Atlantic coast States, the Lake region, and the Ohio Valley the average precipitation for the different months and seasons does not vary greatly.

In December frost may occur in any part of the United States except the extreme southern portion of the Florida Peninsula. During December, January, and February, the trucking districts of the South Atlantic and Gulf States, and the orange groves of Florida and the Gulf coast districts, are